

ABSTRACT OF THE DISCLOSURE

In a plasma processing method for supplying an electric power to a first electrode, making a first electrode have a ground potential, or making a first electrode have a floating potential while supplying gas to a plasma source arranged in a vicinity of an object to be processed at a pressure in a vicinity of an atmospheric pressure. The method includes processing a part of the object to be processed with a plasma in a state where an area of a surface of a potentially controlled second electrode, arranged in a position opposite to the plasma source via the object to be processed, is made superposed on the object to be processed smaller than an area of a surface of the plasma source superposed on the object to be processed.